

Poisoning

(February 2017)

Rationale

Poisoning is common and potentially fatal. It can be accidental or intentional. Accidental poisoning is particularly common in children.

Causal Conditions

(list not exhaustive)

- Common
 - a. Household or work items (e.g., cleaning substances, or other chemical products, cosmetics, plants)
 - b. Anticholinergics (e.g., antihistamines, tricyclics)
 - c. Sympathomimetic (e.g., cold remedies, amphetamines, cocaine)
- Depressants (e.g., alcohol, opiate, sedatives, hypnotics)
 - a. Cholinergics (e.g., insecticides, nicotine)
- Serotonergics (e.g., selective serotonin reuptake inhibitors)
- Analgesics (e.g., acetylsalicylic acid [ASA], acetaminophen)
- Cardiovascular drugs (e.g., digoxin, B-blockers, calcium channel blockers)
- Others (e.g., hallucinogens)

Key Objectives

Given a patient with poisoning, the candidate will diagnose the cause, severity, and complications, and will initiate an appropriate management plan. Particular attention should be paid to determining the nature of the toxicity and exposure and provide specific and supportive care based on the identified cause.

Enabling Objectives

Given a patient with poisoning, the candidate will

- list and interpret critical clinical findings, including
 - a. collateral history aimed at determining the substance involved and the potential severity of the poisoning;
 - b. results of a physical examination aimed at determining the stability of the patient and the nature of the toxidrome (e.g., cholinergic crisis, serotonergic syndrome);
- list and interpret critical investigations, including
 - a. laboratory diagnosis of the substance ingested (e.g., acetaminophen, ASA levels);
 - b. assessment of the toxic effects on the patient (e.g., arterial blood gases, anion and osmolar gaps);
- construct an effective initial management plan, including
 - a. supportive care before or at the same time as data gathering and investigation, (e.g., ensuring airway adequacy, hemodynamic stability);
 - b. appropriate decontamination or prevention of further absorption (e.g., activated charcoal);
 - c. administration of specific antidotes, if indicated (e.g., naloxone, N-acetylcysteine);
 - d. further elimination of the poison (e.g., alkalization, dialysis);
 - e. contacting Poison Control;
 - f. referral for psychiatric assessment, if indicated.